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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,173	10/06/2003	Seann Pavlik	4442-7	2282
23117	7590	07/21/2005	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			HWU, DAVIS D	
			ART UNIT	PAPER NUMBER
			3752	

DATE MAILED: 07/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/678,173

Applicant(s)

PAVLIK, SEANN

Examiner

Davis D. Hwu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 6,7,13,20-24 and 31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,8-12,14-19,25 and 26 is/are rejected.
- 7) ☒ Claim(s) 27-30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/6/03, 2/6/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Edwards.

Edwards shows an apparatus and method for cooling a space or living beings within the space, the space defined at least in part by existing functional elements including at least one substantially liquid-tight passage passage-containing element 14, comprising at least one misting nozzle 12 in operative association with the substantially element 14 and supplying liquid under pressure to flow through element 14 and confined thereby so that the liquid is supplied as a mist directly into the space to evaporatively cool the space or living beings within the space, wherein the device and method are practiced using a hollow canopy frame component on a watercraft in which the canopy frame comprises frame member D and E and substantially rigid liquid conduit 14 in which conduit 14 is a hollow canopy component used as the substantially liquid-tight passage-containing element.

3. Claims 1, 4, 5, 8, 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Kennedy et al.

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Kennedy et al. shows an method of cooling a space or living beings within the space, the space defined at least in part by existing functional elements including at least one substantially liquid-tight passage passage-containing element 17, comprising at least one misting nozzle 10 in operative association with the element 17 and supplying liquid under pressure to flow through element 17 and confined thereby so that the liquid is supplied as a mist directly into the space to evaporatively cool the space or living beings within the space wherein the method is practiced by supplying fresh water under a pressure of between about 200-1000 psi and by providing mist of water droplets having a maximum cross-sectional dimension of between 5-100 microns in the space as recited in claims 4 and 5.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 15, 18, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Terrell et al.

Terrell et al. shows a misting system for supplying a mist of liquid into a space 14 comprising a substantially water-tight passage-containing element and a nozzle 30 as recited and a source of liquid under super-atmospheric pressure operatively connected to the passage-containing element wherein the nozzle has at least one orifice with a diameter of between 0.2 and 0.5 mm as recited in claim 18 and wherein the source of

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liquid comprises a source of fresh water at a pressure of between about 200-1000 psi and operatively connected through a regulator to the passage-containing element as recited in claim 19.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 9-12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards in view of Kennedy et al.

Edwards discloses a method of cooling a space or humans within the space on a watercraft by directly misting fresh water into the watercraft space as mist of water droplets. Kennedy et al. teaches a method of cooling a space or humans within the space by providing mist droplets having a maximum cross-sectional dimension between about 5-100 microns to produce the required degree of flash evaporation and cooling. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Edwards by providing mist droplets having a maximum cross-sectional dimension between about 5-100 microns as taught by Kennedy et al. to produce the required degree of flash evaporation and cooling. The limitations as recited in claim 12 are obvious matter of design choice based on user preferences of comfort level.

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8. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy et al. in view of Elston.

Kennedy et al. discloses a misting system comprising an element 17 capable of withstanding at least 100 psi of liquid flowing therein, at least one internally threaded opening as recited, a misting nozzle 10 including a shaft having an externally threaded portion as recited, the misting nozzle externally threaded portion directly operatively engaging the internally threaded portion. Elston teaches a nozzle 46 engaged in a bore 24 with the interposition of an o-ring 76 to provide a seal against leakages. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Kennedy et al. by incorporating a seal as taught by Elston to prevent leakages.

Allowable Subject Matter

9. Claims 27-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patent to King is pertinent to Applicant's invention.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davis D. Hwu whose telephone number is 571-272-4904. The examiner can normally be reached on 8:00-4:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can

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be reached on 571-272-4919. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Davis Hwu



DAVIS HWU
PATENT EXAMINER